

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections contained in the Office Action of December 15, 2005 is respectfully requested.

Claims 1, 4, 17 and 18 have been elected and were treated in the outstanding Office Action. In particular, the Examiner rejected independent claim 1 as being unpatentable over the Temmesfeld reference (US 4,756,279) in view of the Suzuki reference (US 5,090,270); rejected claim 4 as being unpatentable over the Temmesfeld reference in view of the Suzuki reference, and further in view of the Nixon reference (US 4,476,820); and rejected claims 17 and 18 as being unpatentable over the Temmesfeld reference in view of the Suzuki reference, and further in view of the Tsuchikawa reference (US 4,539,943). However, the Examiner's rejections are respectfully traversed. For the reasons discussed below, it is submitted that independent claim 1 and the claims that depend therefrom are clearly patentable over the prior art of record.

In the previous Office Action of June 24, 2005, the Examiner rejected independent claim 1 as being unpatentable over the Temmesfeld reference in view of the Sturges reference. However, in the remarks submitted with the Amendment filed September 23, 2005, the Applicants noted that the Sturges reference did not disclose or even suggest an automatic transmission oil temperature sensor, or a controller that receives an automatic transmission oil temperature signal so as to control opening and closing of a shutter based on the signal. In view of those remarks, the Examiner withdrew the previous rejections, and has now essentially replaced the Sturges reference with the newly-applied Suzuki reference.

In particular, on page 3 of the Office Action, the Examiner asserted that the Suzuki reference teaches an oil temperature sensor 23 for outputting an oil temperature signal. In addition, a controller controls the opening and closing of a bypass solenoid valve 19 based on the oil temperature signal from the oil temperature sensor 23. Thus, it is the Examiner's position that one of ordinary skill in the art would be motivated by the Suzuki reference to modify the Temmesfeld reference so as to obtain the invention recited in independent claim 1. However, the Applicant respectfully disagrees for the reasons discussed below.

The Suzuki reference discloses a control system for an automatic transmission, and the control system is designed to adjust the flow of hydraulic fluid (i.e., transmission oil) in the control system to compensate for changes in the characteristics of the transmission oil when the automatic transmission is moved from neutral (N) to drive (D). In particular, as explained in column 5, lines 10-15 of the Suzuki reference, when the temperature of the transmission oil decreases, the viscosity of the transmission oil increases. This increase in viscosity will slow the flow of transmission fluid through the control system, causing an undesirable increase in lag time and sluggish operation of the automatic transmission. To compensate for the change in viscosity, the Suzuki reference includes a transmission oil temperature sensor 23 which provides a signal to a control circuit 20, and the control circuit 20 is capable of opening the solenoid valve 19 in a bypass line 18 to allow an additional amount of the transmission oil to flow around the fixed orifice 13 when the viscosity of the transmission oil becomes high (see column 5, lines 24-55 of the Suzuki reference).

In contrast, the controller of independent claim 1 controls the opening and closing of a shutter in a shroud for allowing airflow to flow toward the automatic transmission. More particularly, as now recited in amended independent claim 1, the controller controls the opening and closing of the shutter based on the automatic transmission oil temperature signal received from the automatic transmission oil temperature sensor *so as to control the temperature of the oil in the automatic transmission*.

The Suzuki reference does not disclose or even suggest a controller for controlling the opening and closing of *a shutter* based on the automatic transmission oil temperature signal received from the automatic transmission oil temperature *so as to open and close an air passage*. More specifically, the Suzuki reference does not disclose or even suggest a controller for controlling the opening and closing of the shutter based on the automatic transmission oil temperature signal *so as to control the temperature of the oil in the automatic transmission*. Instead, as explained above, the control circuit 20 of the Suzuki reference operates the solenoid valve 19 so as to ensure that there is proper transmission oil pressure at the clutch 11. In other

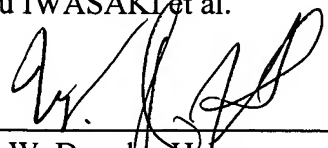
words, the control circuit 20 of the Suzuki reference controls the flow of transmission oil, while the controller of independent claim 1 controls the flow of cooling air.

The Nixon reference teaches an engine compartment structure, and the Tsuchikawa reference teaches an *engine* cooling system, but none of the those references teach or suggest the controller for opening and closing a shutter based on an automatic transmission oil temperature so as to control the temperature of the oil in the automatic transmission. Therefore, because the Suzuki reference, the Nixon reference, and the Tsuchikawa reference do not, either alone or in combination, disclose or suggest the controller and the arrangement of the controller, shutter, sensor, and shroud as recited in amended independent claim 1, one of ordinary skill in the art would not be motivated to modify or combine the references so as to obtain the invention recited in amended independent claim 1. Accordingly, it is respectfully submitted that amended independent claim 1 and the claims that depend therefrom are clearly patentable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. However, if the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact the Applicant's undersigned representative.

Respectfully submitted,

Mitsuru IWASAKI et al.

By: 

W. Douglas Hahm
Registration No. 44,142
Attorney for Applicants

WDH/ck
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
April 14, 2006